

Title: Using Kyuanos Ambient Light Adjustment Function

Model: iPF6100, iPF5100

Note: This information is intended for end users.

Canon introduced a next-generation color management system called Kyuanos. The iPF6100 and iPF5100 utilize this new technology to enable Ambient Light Adjustment Function in the printer driver for Windows operating system. This document describes how to use this function.

Introduction

Kyuanos

Kyuanos is a next-generation color management system (for more details, please refer to http://www.canon.com/technology/canon_tech/explanation/color_management.html) and the new iPF6100 and iPF5100 are among the first to employ this new technology. Ambient Light Adjustment Function is a function of the printer driver where images can be printed for viewing under different light sources of various color temperature, such as fluorescent light, incandescent light, or sunlight.

Compatible Media Types

Since Ambient Light Adjustment requires Kyuanos compatible color profile, currently there are several types of media that can take advantage of the benefit of Ambient Light Adjustment. Here is the list of media that are compatible with the function.

- Glossy Photographic Paper 190gsm
- Satin Photographic Paper 190gsm
- Glossy Photo Paper
- Semi-Glossy Photo Paper
- Poster Semi-Glossy Photo Paper¹
- Commercial Proofing Paper
- Proofing Paper

How to Enable Kyuanos

The function and Kyuanos color management is built-in to the printer driver. There is no separate module that needs to be loaded, even for non-Vista operating system such as Windows 2000 or XP.

¹ Poster Semi-Glossy Photo Paper is a same paper as Satin Photographic Paper (240gsm).

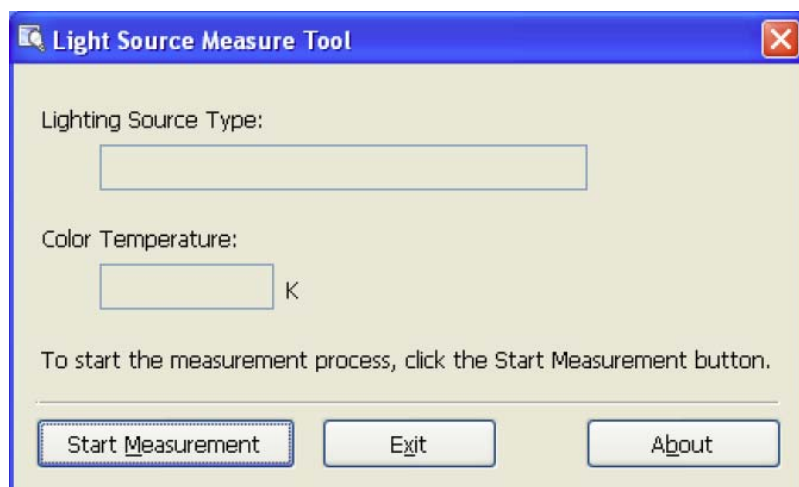
How to use Ambient Light Adjustment

Measuring the Color Temperature of Output Viewing Area

Before the printing using Ambient Light Adjustment, the lighting condition of the area intended for viewing the output needs to be identified. There are two ways to accomplish this. One way is to use a spectrophotometer to measure the ambient light temperature, and the other is to use our test chart to determine the lighting condition.

Using a Spectrophotometer (X-rite Eye-one²)

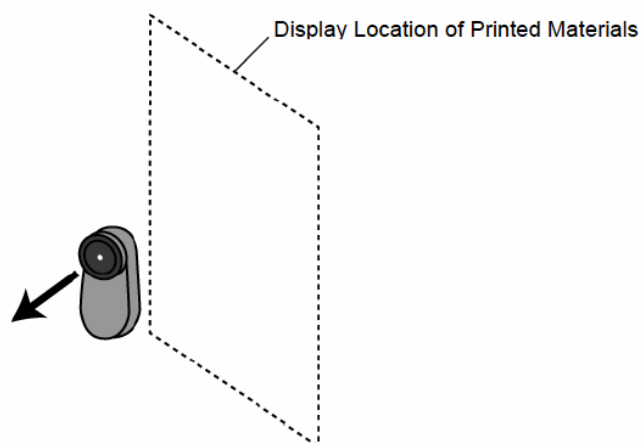
1. Install "Light Source Measure Tool" and "Light Source Check Tool" (See Appendix A) in your system.
2. Start Light Source Measure Tool.



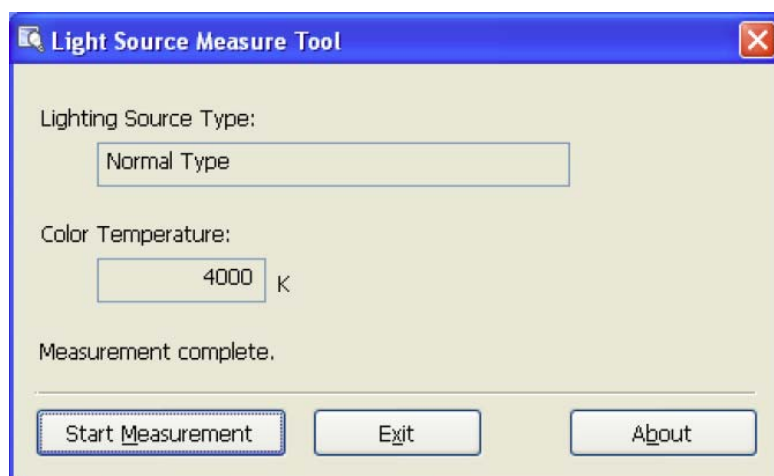
3. Click on "Start Measurement." The [Measurement] dialog box (Step 1: Calibration) will be displayed.
4. Attach the ambient light measuring head and protection cap to the sensor.
5. Press the sensor's Measure button. Calibration of the sensor will begin. Once calibration is complete, the "Measurement" dialog box (Step 2: Measurement) will be displayed.
6. Remove only the protection cap from the sensor.

² Eye-One models supported: Eye-One Design, Eye-One Photo, Eye-One Pro Photo, Eye-One Pro Publish, Eye-One Workflow. EFI Spectrophotometer ES-1000 is also supported.

- Next to the location where the poster will be displayed, position the direction of the sensor as illustrated below.

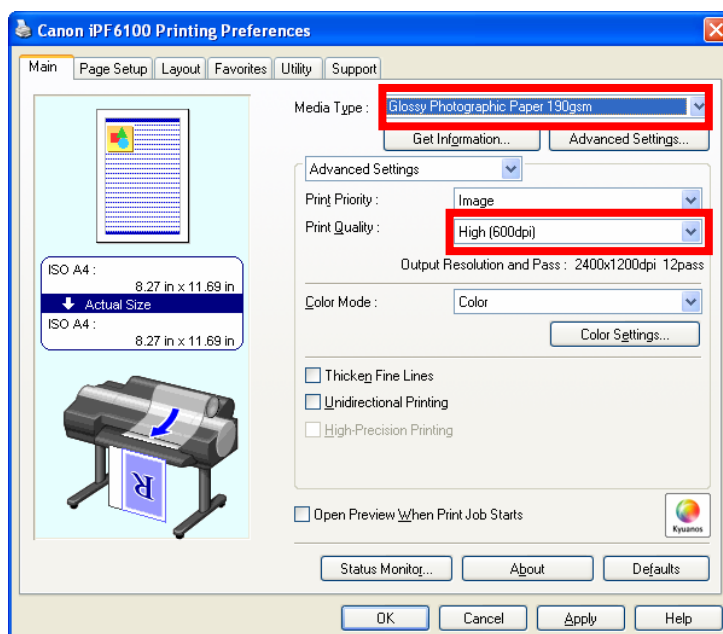


- Press the "Measure" button (and press the button on the spectrophotometer, if equipped). Ambient light information (Lighting Source Type, Color Temperature) will be displayed in the Light Source Measure Tool screen.

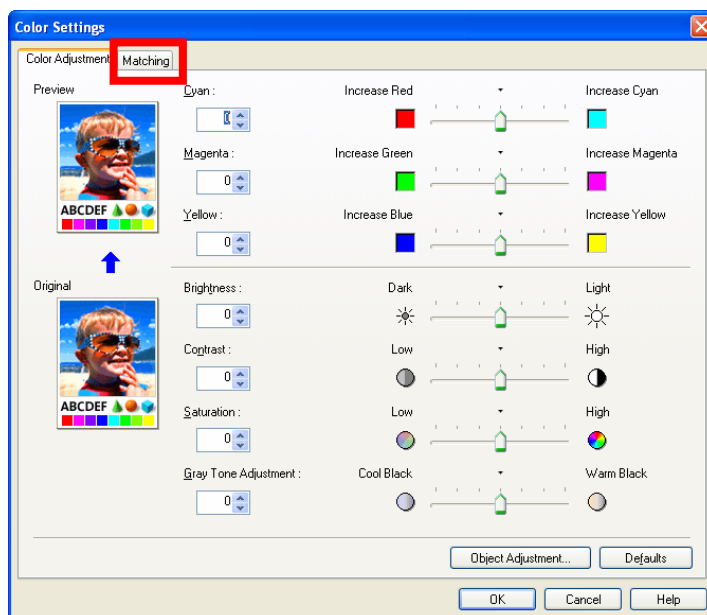


- Make a note of this lighting source type and color temperature.

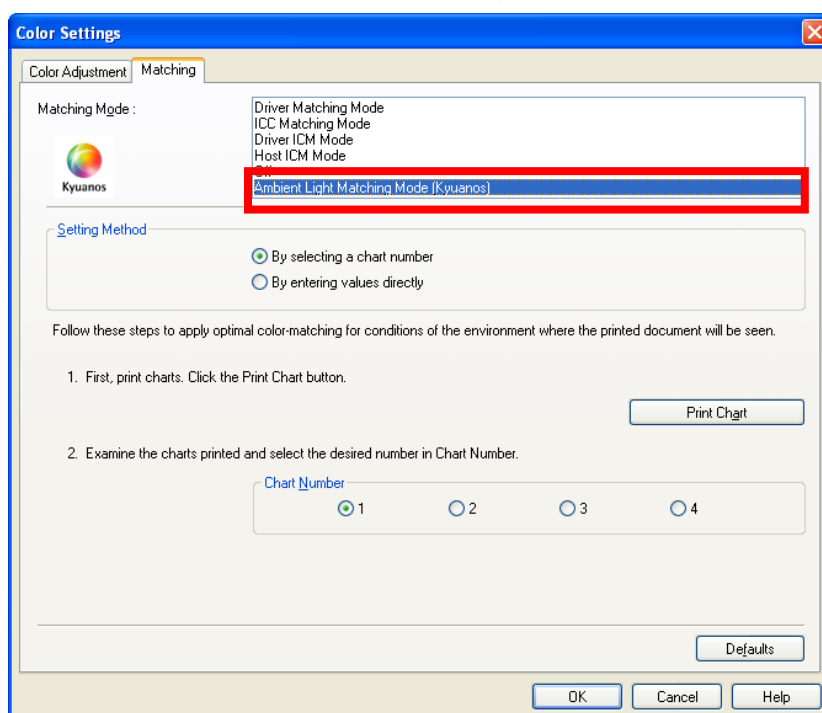
10. Open Printing Preferences dialog of the printer driver. Select Media Type as one of the supported media types you intend to use (Glossy Photographic Paper 190gsm, Glossy Photo Paper, Satin Photographic Paper 190gsm, Semi-Glossy Photo Paper, Poster Semi-Glossy Photo Paper¹, Commercial Proofing Paper, or Proofing Paper), and set the Print Quality to either "High (600dpi)" or "Highest (600dpi)" depending on your preference. ("Standard (600dpi)" setting is not supported for this feature.)



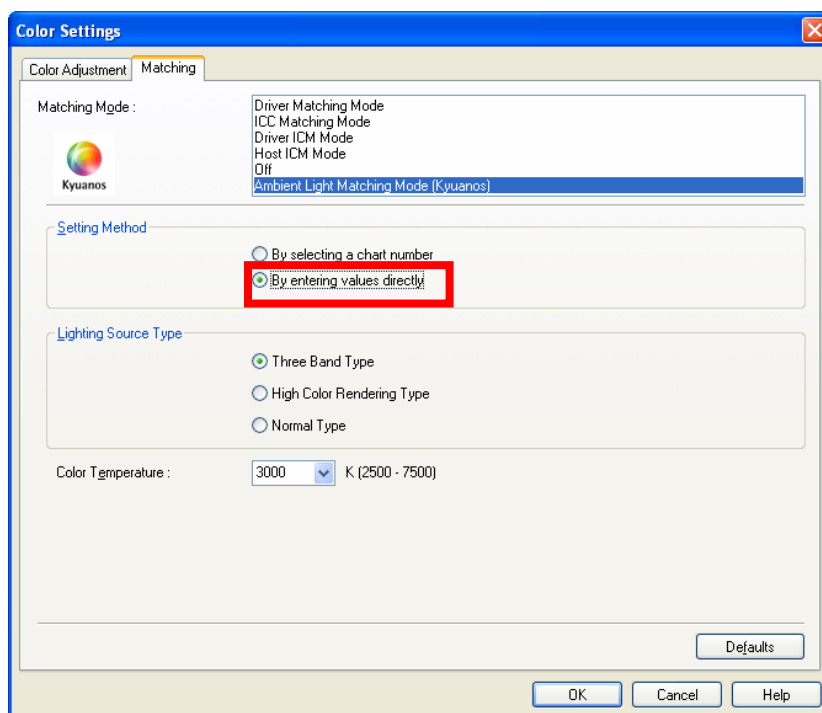
11. Click on "Color Settings..." button to open Color Settings dialog. Click on "Matching" tab.



12. Click on "Ambient Light Matching Mode (Kyuanos):"

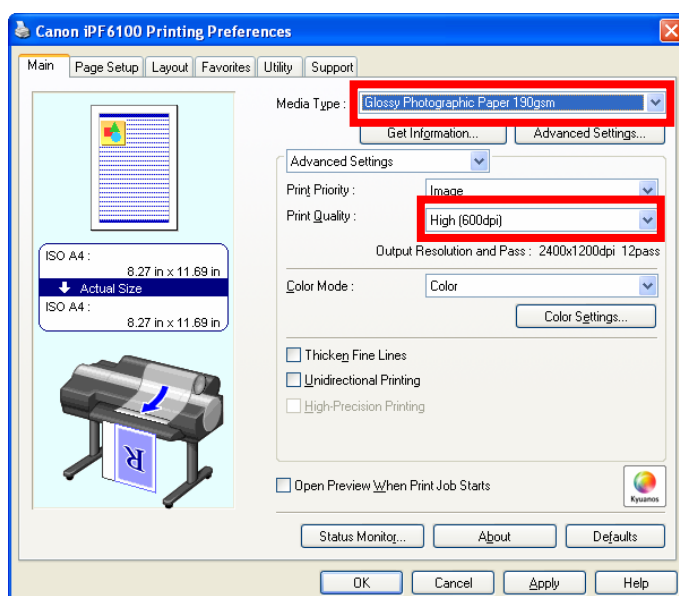


13. Select "By entering values directly". Enter the type of light source of the intended viewing area and color temperature obtained from Light Source Measure Tool in step 8. Click OK to register the setting. Perform printing to use this correction value.

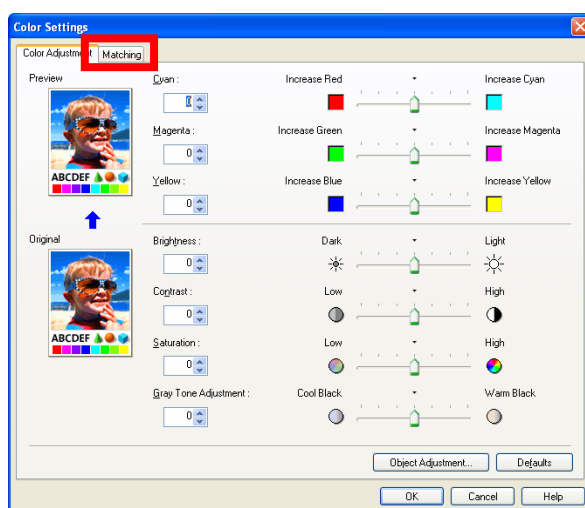


Using Adjustment Sample (without Spectrophotometer)

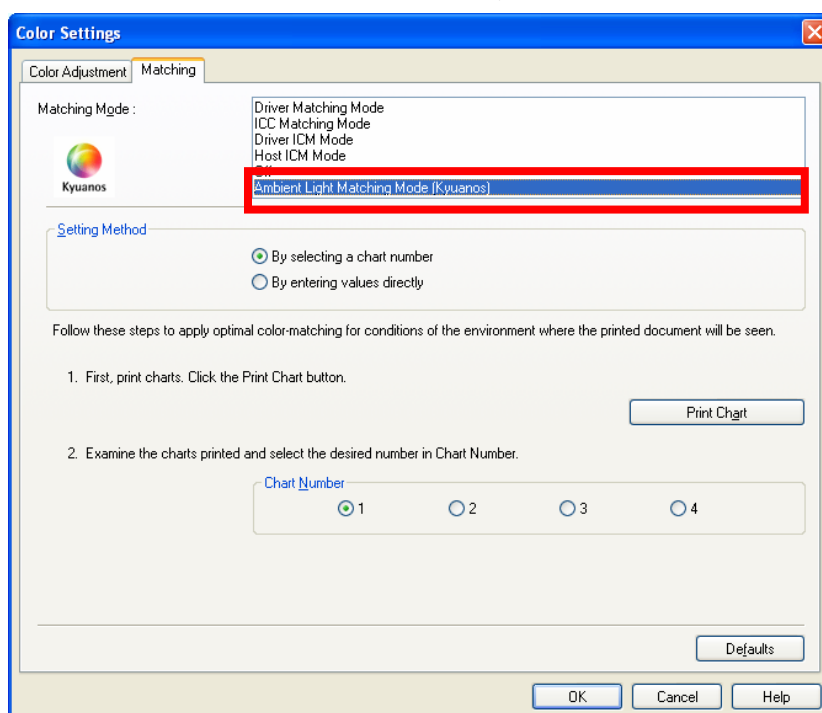
1. Open Printing Preferences dialog of the printer driver. Select Media Type as one of the supported media types you intend to use (Glossy Photographic Paper 190gsm, Glossy Photo Paper, Satin Photographic Paper 190gsm, Semi-Glossy Photo Paper, Poster Semi-Glossy Photo Paper¹, Commercial Proofing Paper, or Proofing Paper), and set the Print Quality to either "High (600dpi)" or "Highest (600dpi)" depending on your preference. ("Standard (600dpi)" setting is not supported for this feature.)



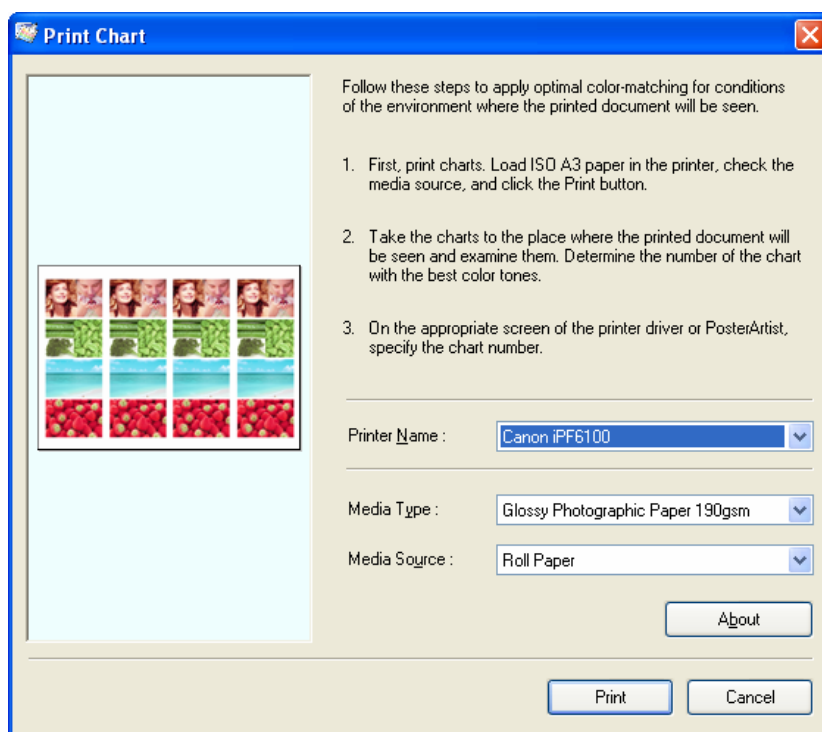
2. Click on "Color Settings..." button to open Color Settings dialog. Click on "Matching" tab.



3. Click on "Ambient Light Matching Mode (Kyuanos)":



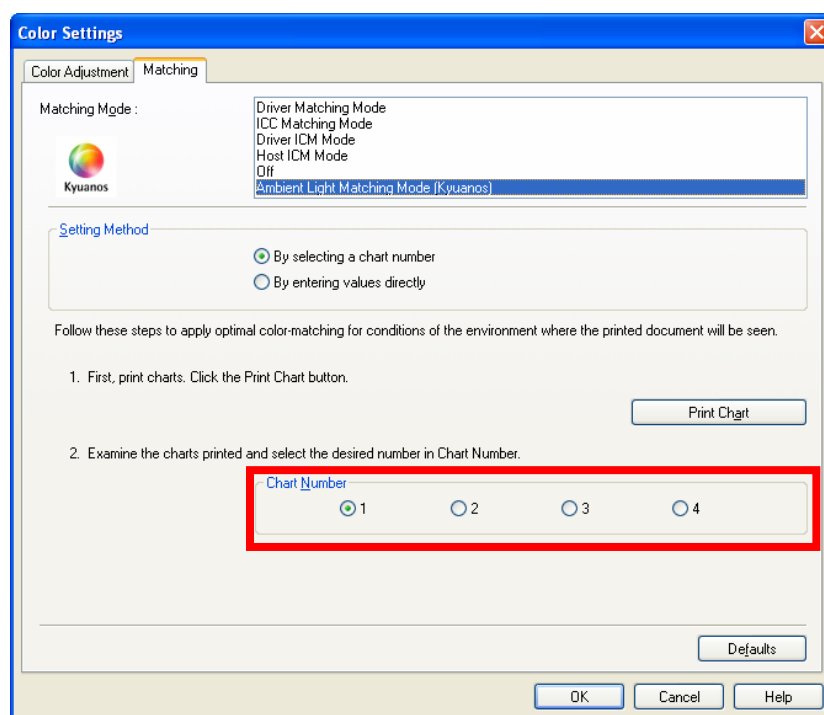
4. Select "By selecting a chart number". Click on "Print Chart" button to print the sample chart on the printer. "Print Chart" dialog box opens.



5. Make sure the Printer Name, Media Type, and Media Source settings are correct, and click on "Print" button.
6. The test chart is printed on the printer. Take the test chart to the intended viewing area. Determine which sample looks the best and make a note of it.

Hint: Each sample represents different color tones. Take a look at the light skin tones, green vegetables, blue sky and sea, red strawberries. First, examine the colors and objects similar to what your output would contain. For example, vegetables should be referenced for images with deep forest landscapes. Examine the color tone. The image should have no obvious color cast. Choose the image most pleasing to your eyes. Also examine the shadow details. Depending on the type of light source, shadow details are often lost or enhanced. Select the sample which gives you enough detail without losing the overall tones.

7. Select the number that corresponds with the number selected from the sample. Click "OK" and perform printing. The image printed will reflect the adjustment.



Hint: Chart number 1 is suited for 3000K three-band light, 2 is suited for 5000K three-band light, 3 is suited for 5000K normal light, and 4 is suited for 4500K high color rendering light.